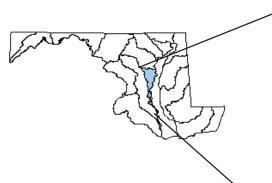
# West Chesapeake Basin

## Current Status of Wadeable Streams

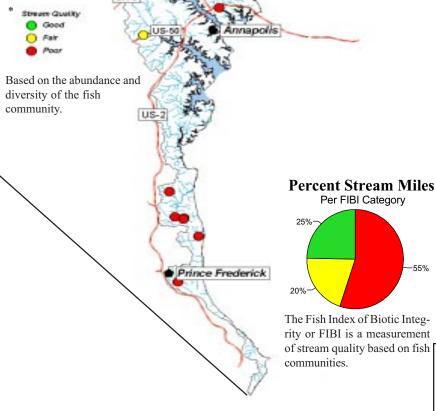


Where is the West Chesapeake River basin?

The West Chesapeake River basin is located in Anne Arundel and Calvert counties, Maryland. The Magothy, Severn, South, West, and Rhode Rivers are all part of the network of streams that make up the basin.



Eagle's Cove, part of the Magothy River, provides an opportunity for water sports in a beautiful setting.

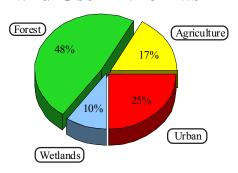


#### What Lives in Our Streams?\*

Estimated Fish Abundance: 736	,997
Number of Fish Species:	29
Number of Gamefish Species:	3
Number of Reptile and Amphibian Species:	15
Number of Freshwater Mussel Species:	3

\*Based on Maryland Biological Stream Survey collections in wadeable streams basin-wide in 1997.

### Land Use in the Basin



Although nearly half of the land use in the basin is forest, the basin is being developed rapidly. The population is expected to increase 80% in the xt 20 years. The basin covers an area of 305 uare miles with a population density of 807 ople per square mile.



#### **Water Quality**



Per FIBI Category

Oxygen - 82% of the streams in the basin had oxygen levels above the state water quality standard of 5 mg/L.



Nitrate - 33% of the streams had nitrate levels (>1 mg/L) that may affect aquatic life. The main sources of nitrates in small streams are fertilizers and acid rain



**Buffering Capacity - 83%** of the streams are well-protected against acid rain.



Good

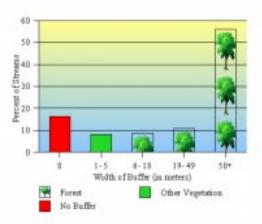
Fair



Poor

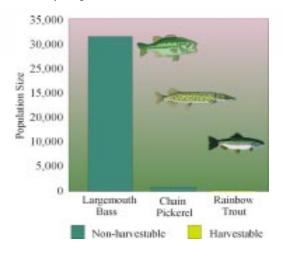
#### Riparian Zone

Trees and vegetation that border a stream are called the stream's *riparian buffer*. This zone protects a stream against runoff, provides shade, and supplies food and shelter for aquatic life. A wide and intact buffer provides more protection than a narrow one. The riparian buffers in the West Chesapeake basin are in generally good condition. We can help maintain these buffers by keeping forested areas plentiful.



#### Gamefish

Three species of gamefish were found in the basin. Out of the three species, only one had individuals of harvestable size. It appears that the tributary streams of the basin serve as a nursery for gamefish.





- The natives in the basin, the Susquehannock Indians, signed a treaty in 1652 with European settlers.
- \*40% of the streams in the basin are rated as aesthetically pleasing.
- •The West Chesapeake is the third most densely populated basin in Maryland. The population is expected to increase 80% by 2020.



Striped Bass, a popular gamefish, use some freshwater streams in the basin as nurseries.

#### **Community Involvement**

Want to help? These community groups can show you how!

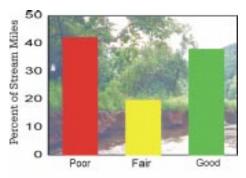
Alliance for the Chesapeake Bay 6600 York Road, Suite 100 Baltiomore, MD 21212 Kathleen Millan (410) 377-6270

Magothy River Association P.O. Box 550 Severna Park, MD 21146 Dr. Sally Horner (410) 647-6254 Severn River Association P.O. Box 146 Annapolis, MD 21404 James Martin (410) 263-0435



#### **Stream Bank Stability**

Eroded, unstable banks reduce habitat quality in streams and contribute to water quality problems in downstream areas. The stream banks in the West Chesapeake are in fair condition. Since streams in this basin flow into the Chesapeake Bay, this bank instability causes an increase in nutrients and suspended sediments entering the Bay.



Stream Bank Condition

#### Recreation

Sandy Point State Park, Calvert Cliffs State Park, and many other places in the basin offer recreational opportunities. Popular activities include fishing, hunting, trapping, canoeing, picnicking, camping, swimming, hiking, boating, and nature observation.



In the West Chesapeake, rowing is a sport growing in popularity with every passing year.

For more detailed information on streams in the West Chesapeake basin and elsewhere in Maryland, contact Anne Smith of DNR/MANTA at (410) 260-8610 or email asmith@dnr.state.md.us, or check out the DNR web site at www.drr.state.md.us/Bavs/wateraual/imbss/mbss.html.